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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/663,894

09/16/2003

Chi-Ming Che

9661-041-999

4526

32172

7590

06/07/2006

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EXAMINER

GEMBEH, SHIRLEY V

ART UNIT

PAPER NUMBER

1614

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/663,894 | <b>Applicant(s)</b><br>CHE, CHI-MING |  |
|                              | <b>Examiner</b><br>Shirley V. Gembeh | <b>Art Unit</b><br>1614              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 14-24, 38-54, 56-57 and 60-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 25-37, 55, 58 and 59 is/are rejected.
- 7) ☒ Claim(s) 55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The response filed February 17, 2006 presents remarks and arguments to the office action mailed January 25, 2006. Applicant elects group I (claims 1-13, 25-37, 55 and 58-59 for examination and if found allowable rejoinder of claims 49-50).

#### **Status of claims**

Claims 1-13, 25-37, 55 and 58-59 are elected and are pending.

Claims 14-24, 38-54, 56-57 and 60-63 are withdrawn.

Claim 55 is objected to under 37 CFR 1.75(c) as being in improper form because a claim cannot properly depend on a non-elected invention Group IV claim.

#### **Response to Restriction**

Applicant's election of claims 1-13, 25-37, 55 and 58-59 in the reply filed on February 17, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 1-13 25-37, 55 and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheelhouse et al. US 6,087,493 in view of Argyris et al. J. biological chem.

Wheelhouse et al. teach with regards to claims 1-13 modulating tumor proliferation and mortality in animal models (see col. 2, lines 40+) using a metal porphyrin having (see col. 3 lines 20-40) where in the metal ion is gold (see col. 3, lines 15-20). With regard to the substitutions the preparation of porphyrins is versatile with a wide range of pyridyl and quinolyl aldehydes available lends itself to combinatorial synthesis of new porphyrin (see col. 31, lines 33+). Thus making it obvious for one of ordinary skill in the art to synthesize new porphyrins that will result in the claimed invention.

Argyris et al. teach with regards to claims 25-37, 55, 58-59 that heme and zinc porphyrin inhibit both human immunodeficiency virus type 1 and type 2 reverse transcriptase, with a ligand peptide (see abstract underlined section).

The claims differ only in the sense that the prior art did not specifically teach all the substituents of R (1-12). However, the Argyris et al. teach six membered heteroaryls which represents substituents of R(1, 4, 7 and 10). Although, Argyris et al. did not teach R(2-3, 5-6, 8-9 and 11-12 to be independently H, when no substitution is indicated. It is well known to one of ordinary skill in the art that a carbon atom not having a substituent and if all bonds to the atom is satisfied then it is a known knowledge that the bond is to a hydrogen. One having ordinary skill in the art would have been motivated to select the claimed invention with the expectation that substitution of the R(1-12) would not

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significantly alter the analogous properties of the compound of the reference due to close structural similarity of the compounds and based on the fact that the general substituent is taught in the prior art.

It would have been obvious to one of ordinary skill in the art at the time the claim invention was made to select any of the species of the genus (gold) as taught by Wheelhouse, combined with the teachings of Arygyris et al. because an ordinary skill in the art would have the reasonable expectation of success because it is taught by the above cited references before the claimed invention.

Thus, the claimed invention was prima facie obvious to make and use at the time it was made.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley V. Gembeh whose telephone number is 571-272-8504. The examiner can normally be reached on 8:30 -5:00, Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SVG  
5/8/06

 5/30/06  
**ARDIN H. MARSCHEL**  
**SUPERVISORY PATENT EXAMINER**